6.2 Module 2: Applications Technology

Module Title	Applications Technology
Module NFQ Level (only if an NFQ level can be demonstrated)	6
Module number/Reference	BAAMT102
Parent Programme	BA (Hons) in Audio and Music Technology
Stage of Parent Programme	1
Semester	1 and 2
Module Credit Units (FET/HET/ECTS)	ECTS
Module Credit number of Units	10
List the teaching and learning modes	FT
Entry requirements (statement of knowledge, skill and competence)	Learner has earned level 5 qualification. No previous applications technology ability is required.
Pre-requisite module titles	None
Co-requisite module titles	None
Is this a capstone module? (Yes or No)	No
Staff qualifications (academic, pedagogical and professional/occupational) and experience required. (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)	Staff are required to have at least a Bachelor of Arts (Honours) qualification in Music Technology or related discipline. Industry experience would be a benefit but is not a requirement. Staff are expected to have the Certificate in Training and Education qualification from Griffith College or its equivalent.
Staff/learner ratio per centre (or instance of the module)	For lecture load, ratio of 1:50 lecturer to learner is required and in lab sessions the maximum allowed is 1:25. The lecturer will also have 1 hour per week set aside in their timetable for 1:1 contact with learners who require it or have particular items they want to discuss.
Maximum number of learners per centre (or instance of the module)	50
Duration of the Module	Two Academic Semesters, 24 weeks teaching.
Average (over the duration of the module) of the contact hours per week.	3
Physical resources and support required per centre (or instance of the module)	One lecture hall with capacity at least 50 and one Computer lab with capacity of 25.

Analysis of Required Learning Effort										
Effort while in contact with staff										
Classroom and Demonstrations		Mentoring and small group tutoring		Other (Specify)		Directed e-learning (hours)	Independent learning (hours)	Other hours (specify)	Work-based learning hours of learning effort	Total Effort (hours)
Hours	Minimum ratio teacher/learner	Hours	Minimum ratio teacher/learner	Hours	Minimum ratio teacher/learner					
48	1:50	24	1:25				178			250
Allocation of marks (within the module)										
					Continuous Assessment	Supervised Project	Proctored practical	Proctored Written Examination	Total	
Percentage contribution					**100%**				**100%**	

6.2.1 Module Aims and Objectives

The objectives of the module are to enable the learner to use industry standard DAW software to record and edit audio and MIDI, managing sessions from conception to final mix-down using appropriate effects, automation, corrective techniques and professional workflow.

6.2.2 Minimum Intended Module Learning Outcomes

On successful completion of this module, the learner will be able to:

MLO 2.1	Use industry standard software to record and edit audio and MIDI.
MLO 2.2	Work with audio dynamic and time-based effects.
MLO 2.3	Mix and automate on a digital audio workstation.
MLO 2.4	Competently manipulate pitch and time.
MLO 2.5	Employ successful workflow techniques.

6.2.3 Rationale for inclusion of the module in the programme and its contribution to the overall IPLOs.

Computer based applications have become industry standard throughout the entire audio industry. Whether it's in a recording studio, a TV/Radio station, out on location or working from home, an understanding of industry standard applications is essential for any producer/engineer. The learning outcomes of this module contribute to the learners' attainment of Programme Learning Outcomes 3, 1 and 8.

6.2.4 Information Provided to learners about the Module.

Learners enrolled on this module will receive a copy of the module descriptor and assessment briefs.

6.2.5 Module Content, Organisation and Structure

The module is organised to deliver theory through lectures and supervised tutorials. During tutorials, each learner will have a workstation allowing the lecturer to work individually with learners to demonstrate and explain the material.

The lectures each week will combine lecture delivery and discussion on the material.

Each lecturer has a time allocated for one-to-one meetings with learners as required. These are not mandatory sessions but available either where the lecturer wishes to discuss an element of the module with a learner or a learner requests a meeting to discuss a particular topic. These sessions focus on academic issues only.

Module Content

Pro Tools 101:

- Inside Pro Tools
- Creating a session
- Audio recording
- Importing media into your session
- MIDI recording
- Selecting and navigating
- Editing techniques
- Mixing techniques
- Finishing work

Pro Tools 110:

- Interfacing with external hardware
- Enhancing software and managing data
- Recording MIDI & audio
- Working with time bases, elastic audio, and virtual instruments
- Editing and time-adjusting MIDI and audio
- Editing audio
- Automation
- Mixing

Logic Pro 101:

- Introducing Logic
- Recording audio
- Editing audio
- Recording MIDI
- Programming and editing MIDI
- Programming drums
- Manipulating tempo and time stretching
- Mixing

6.2.6 Module Teaching and Learning Strategy

Classes are used to explain the concepts and exemplify (in workshop style) a series of exercises. Developing a learner's ability in DAWs requires constant reinforcement and so sample recordings are worked through both as tutorials and by the learner outside of direct contact hours.

Activity	Teaching / Learning Strategy	Learning Environment
Lectures (48 hours)	Lectures / participative discussions / problem solving exercises / demonstrations of use of the DAW	College
Practical (24 hours)	Learning / practicing application of DAW skills / training in use of DAW with latest versions of Pro Tools and Logic Pro / use of audio interfaces and MIDI controller keyboards	College / Mac lab
Independent Work (178 hours)	Directed and self-directed learning / home study / practice use of DAW skills	College / Home
Examination (3 hours)	In-class assessment of knowledge and related skills	College

6.2.7 Timetabling, Learner Effort and Credit

The module is timetabled as one 3-hour session to the whole class. This will consist of the 2-hour lecture and a 1-hour tutorial with Digital Audio Workstations. On the workstations, the learners engage directly with software used within Professional Audio environments.

The number of credits assigned to this module is our assessment of the learner effort required. It is our view that 10 ECTS of learner effort is required by learners coming new to the material to achieve the learning outcomes required.

6.2.8 Work-Based Learning and Practice Placement.

There is no work based learning or practical placement in the module.

6.2.9 E-Learning

The College VLE is used to disseminate notes, advice and online resources to support the learners. The learners are also given access to Lynda.com as a resource for reference.

6.2.10 Module Physical Resource Requirements

Requirements are for a fully equipped lecture hall and access for learners to a computer workstation with industry standard software. Access to hardware such as MIDI keyboards and i-Loks is also required.

6.2.11 Reading Lists and other information resources.

Cook, F. (2013) *Pro Tools 101 Official Courseware,* Boston MA: Delmar Cengage Learning.
CTCL (2013) *Pro Tools 110 Official Courseware.*
Nahmani, D. (2015) *Logic Pro X Professional Audio Production.* Berkley: Peachpit.
Hirsch, S. (2015) *Up and running with Pro Tools.* Lynda.com.
Lewin, S. (2016) *Pro Tools 12 Essential Training.* Lynda.com.
Mayfield, M. (2016) *Foundations of Digital Audio.* Lynda.com

6.2.12 Specifications for Module Staffing Requirements

For each instance of the module, there will be one lecturer qualified to at least Bachelor of Arts (Honours) level in Music Technology or equivalent and with a relevant third level teaching qualification (e.g. Certificate in Training and Education). Depending on numbers, a lab assistant may be required. Where this is the case the assistant will be required to have a sound understanding of digital audio workstations, either through industry experience or academic qualification. For example, a final year Bachelor of Music Production (Honours) learner may be suitable to assist the lecturer in lab sessions. Any lab assistant will work under the supervision of the lecturer.

6.2.13 Module Summative Assessment Strategy

The assessment in based on three In-Class Assessments consisting of multiple-choice tests of 1 hour in duration.

Name	Description	Weighting	Learning Outcomes
Logic 101	In class assessment on Logic fundamentals.	30%	1 -5
Pro Tools 101	In class assessment on Pro Tools fundamentals.	30%	1 - 5
Pro Tools 110	In class assessment on core concepts and skills.	40%	1 - 5

These assessments focus on theory and practical application of the various software packages. Learners may choose to complete Pro Tools and Logic industry online exams at any time during their programme.

6.2.14 Sample Assessment Materials

Pro Tools 101 Sample Questions:

1. Which of the following is TRUE about 'grouping'?

A. The 'All Group' can be deleted.
B. Deleting groups can be undone.
C. Groups cannot be renamed.
D. Groups can be modified to change their membership
E. All of the above are true.
Answer: _____

2. The number of processors used for the host-based (native) plug-in processing can be set in the _____ dialog box.

A. Options > Audio Suite
B. Playback Engine
C. Disk Allocation
D. I/O Setup
E. Preferences.
Answer: _____